REMARKS

The Office Action dated February 25, 2004 has been received and carefully noted. The above claim amendments, along with the following remarks, are submitted as a full and complete response thereto.

Claim 32 has been cancelled without prejudice or disclaimer of the subject matter recited therein. Upon entry of this response, Claims 1-31 and 33-37 will be pending in the present application. Claims 1, 12, 17, 22-28, and 37 are independent claims. Claims 1-31 and 33-37 have been amended to more particularly point out and distinctly claim the present invention. Support for the subject matter added to claims 1-31 and 33-37 may be found throughout the present application. No new matter has been added. Claims 1-31 and 33-37 are respectfully submitted for consideration.

Objection to Claims 1-27 and 35-37 due to Informalities:

Claims 1-27 and 35-37 were objected to due to informalities. The above amendments to claims 1-27 and 35-37 directly address the comments included in the Office Action and render this objection moot.

Rejection of Claims 1, 11-12, 17, and 21-27 Under 35 U.S.C. §§ 102 and 103:

Claims 1, 11-12, 17, and 21-27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,374,112 B1 to Widegren et al (Widegren '112). This rejection is respectfully traversed.

Claim 1, upon which claims 2-11 depend, recites a handover method between two radio systems with different physical traffic channels and different radio link protocols including retransmission mechanisms. The method includes handing over a non-transparent call from a traffic channel of an old radio system to a traffic channel of a new radio system, retaining the radio link protocol of the old radio system between a mobile station and an interworking function, and transmitting radio link protocol frames of the old radio system adapted to the traffic channel of the new radio system.

Claim 12, upon which claims 13-16 depend, recites a dual-mode mobile station with capacity to operate between two radio systems with different physical traffic channels and different radio link protocols including retransmission mechanisms. The mobile station includes adapter means for establishing a first radio link protocol in a non-transparent call between the mobile station and an interworking function in a first radio system, and a second radio link protocol between the mobile station and the interworking function in a second radio system. The mobile station also includes means for performing a handover for the non-transparent call from a traffic channel of the first radio system to a traffic channel of the second radio system and vice versa. The adapter means is arranged to retain a radio link protocol of an old radio system between the mobile station and the interworking function in a handover that is carried out from the traffic channel of the first radio system to the traffic channel of the second radio system, or vice versa, and the adapter means is arranged to transmit the radio link protocol frames of the old radio system adapted to the traffic channel of the new radio system.

Claim 17, upon which claims 18-21 depend, recites a telecommunication system including an arrangement for performing a handover between two radio systems with different physical traffic channels and different radio link protocols wherein a mobile station and an interworking function are arranged to retain the radio link protocol of an old radio system when a handover for a non-transparent call is carried out from a traffic channel of the old radio system to a traffic channel of a new radio system, and to transmit the radio link protocol frames of the old radio system adapted to the traffic channel of the new radio system.

Claim 22 recites a handover method in a telecommunication system where a mobile station is able to use as an access network a wired access network or a radio access network with different link protocols for non-transparent calls. The method includes handing over a non-transparent call from the wired access network to the radio access network, or vice versa, retaining a link protocol of an old access network between the mobile station and an interworking function, and transmitting link protocol frames of the old access network adapted to a transmission path of a new access network.

Claim 23 recites a telecommunication system where a mobile station is able to use as an access network a wired access network or a radio access network with different link protocols for non-transparent calls, the system including an arrangement for performing a handover between the wired access network and the radio access network or between two wired access networks. The mobile station and an interworking function are arranged to retain a link protocol of an old access network when a handover for a non-transparent call

is carried out from the wired access network to the radio access network or vice versa, and to transmit link protocol frames of the old access network adapted to the transmission path of a new access network.

Claim 24 recites a dual-mode mobile station with ability to use a wired access network as the access network, or including different link protocols for non-transparent calls. The mobile station includes adapter means for forming a first link protocol in a non-transparent call between the mobile station and an interworking function in a radio access network, and a second link protocol between the mobile station and an interworking function in a wired access network, and means for performing a handover for a non-transparent call from the wired access network to the radio access network and vice versa, or over a wired connection from the access network. The adapter means is arranged to retain a link protocol of an old access network between the mobile station and the interworking function in a handover carried out from one wired access network to another, and the adapter means is arranged to transmit the link protocol frames of the old access network adapted to a transmission path of the new access network.

Claim 25 recites a handover method in a telecommunication system where a terminal equipment is able to use as an access network two wired access networks with different link protocols for non-transparent calls. The method includes handing over a non-transparent call from one wired access network to another, retaining an link protocol of the old access network between the terminal equipment and an interworking function,

and transmitting link protocol frames of the old access network adapted to the transmission path of a new access network.

Claim 26 recites a telecommunication system where a terminal equipment is able to use as an access network two wired access networks with different link protocols for non-transparent calls, the system including an arrangement for performing a handover between the two wired access networks, wherein the terminal equipment and an interworking function are arranged to retain a link protocol of an old access network when a handover for a non-transparent call is carried out from one wired access network to another, and to transmit link protocol frames of the old access network adapted to the transmission path of a new access network.

Claim 27 recites a dual-mode terminal equipment with ability to use as an access network two wired access networks with different link protocols for non-transparent calls. The mobile station includes adapter means for forming a first link protocol in a non-transparent call between the terminal equipment and an interworking function in the first wired access network, and a second link protocol between the terminal equipment and an interworking function in the second wired access network, and means for performing a handover for a non-transparent call from one wired access network to another, wherein the adapter means is arranged to retain the link protocol of an old access network between the terminal equipment and the interworking function in a handover carried out from one wired access network to another, and the adapter means is arranged

to transmit link protocol frames of the old access network adapted to the transmission path of a new access network.

Widegren '112 discloses flexible radio access and resource allocation in a Universal Mobile Telephone System (UMTS). Widegren '112 also discloses a UMTS Terrestrial Access Network (UTRAN) that, in response to a radio bearer service request, flexibly and efficiently allocates resources necessary to support a communication with a mobile radio. Widegren '112, issued on April 16, 2002, has a filing date of April 1, 1999 and claims domestic priority from U.S. Provisional Application No. 60/080,548, which was filed on April 3, 1998.

The Provisional Application, which discloses radio access in a UMTS, is significantly different from Widegren '112. For example, instead of a UTRAN, the Provisional Application merely discloses a UMTS Radio Access Network (URAN). Also, the Provisional Application fails to disclose or subject a majority of the subject matter disclosed on column 7, lines 17-40, of Widegren '112, which is used throughout the Office Action to reject claims 1, 11-12, 17, and 21-27 of the present application.

The present application was filed in the U.S. on November 9, 2000 and claims priority under 35 U.S.C. § 119 from Finnish patent applications 981041 and 981407, filed on May 11, 1998 and June 17, 1998, respectively. Certified copies of the Finnish applications were submitted to the U.S. Patent Office on May 4, 2001. In the above-mentioned Office Action, acknowledgement was made of the claim for foreign priority under 35 U.S.C. § 119. It was also acknowledged in the Office Action that all of the

certified copies of the priority documents had been received. Therefore, the present application has a priority date that is earlier than the filing date of Widegren '112 but later than the filing date of the Provisional Application.

In view of the above, Widegren '112 can only be properly cited as prior art against the present application to the extent that the subject matter disclosed therein and used to reject the claimed invention is fully supported by the Provisional Application. As such, column 7, lines 21-22, of Widegren '112, which discloses "radio link control (RLC) retransmission protocol, a vocoder with a specific bit rate, etc.", cannot be properly cited against claims 1, 11-12, 17, and 21-27 of the present application because no support exists for this phrase in the Provisional Application, and there is no comparable disclosure. Further, since this phrase was alleged in the Office Action to be analogous to the "different link protocols" recited in claims 1, 11-12, 17, and 21-27 of the present application, Applicants respectfully submit that claims 1, 11-12, 17, and 21-27 are patentable over Widegren '112. No other disclosure

At least in view of the above remarks, reconsideration and withdrawal of the rejection of claims 1, 11-12, 17, and 21-27 under 35 U.S.C. § 102(e) as being anticipated by Widegren '112 is respectfully requested.

Rejection of Claims 28 and 37 Under 35 U.S.C. § 103(a):

Claims 28 and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,073,018 to Sallberg (Sallberg '018) in view of U.S. Patent No. 6,480,476 B1 to Willars (Willars '476). Claims 28 and 37 have each been amended to

include all of the subject matter previously recited in claim 32. As acknowledged in the Office Action, claim 32 recited allowable subject matter. Therefore, the amendment of claims 28 and 37 renders the rejection thereof under 35 U.S.C. § 103(a) moot.

Allowable Subject Matter:

Applicants thank the Examiner for acknowledging that claims 2-10, 13-16, 18-20, and 29-36 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1, 12, 17, and 28, upon which claims 2-10, 13-16, 18-20, and 29-31, and 33-36 depend, have been shown above to recite allowable subject matter. Therefore, reconsideration and withdrawal of the objection to claims 2-10, 13-16, 18-20, 29-31, and 33-36 as being dependent upon a rejected base claim is respectfully requested.

Applicants respectfully submit that all of the comments included in the Office Action have been addressed and that all of the objections and rejections included in the Office Action have been overcome. Applicants respectfully further submit that, at least in view of the above, claims 1-31 and 33-37 of the present application contain allowable subject matter. Therefore, it is respectfully requested that all claims pending in the present application be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

33,125 for

Hermes M. Soyez, Ph.D.
Registration No. 45,852

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

HMS:jd

Enclosure: Petition For Extension of Time